

Remarks

Applicants respectfully request reconsideration of this application as amended.

Claims 1 and 9 have been amended. No claims have been cancelled. Therefore, claims 1-16 are presented for examination.

Claims 1-16 stand rejected under 35 U.S.C. §102(b) as being anticipated by Searls (U.S. Patent No. 6,752,635). Applicants submit that the present claims are patentable over Searls.

Searls discloses an LGA IC package-socket-PCB assembly 200 for mounting on a printed circuit board (PCB) 202. The PCB includes a socket body 204, where LGA contacts 106 and 206, fit into the socket body 204. The socket body 204, is soldered to the PCB 202. The IC package 208 mounts to the top side of the socket body 204. The PCB 202 has a signal delivery area 220 and a power delivery area 222. The socket body 204 has a signal delivery area 224 and a power delivery area 226. The IC package 208 has a signal delivery 228 area and a power delivery area 230. Each of the signal delivery areas correspond to the other signal delivery areas such that input/output (I/O) signals such as data and address signals coming from signal planes in the PCB 202 (e.g., through a particular PCB 202 via) is electrically coupled to the appropriate solder pad 216, contact 206, and socket body 204 land. Likewise, each of the power delivery areas correspond to the other power delivery areas such that power and ground coming from power and ground planes in the PCB 202 (e.g., through a particular PCB 202 via) is electrically coupled to the appropriate solder pad 216, contact 206, and socket body 204 land. The solder pads 216 are in the signal delivery area 220, slots 212 are in the signal delivery area 224, and the lands 209 are located in the signal delivery area 228. A single contact 106 fits into a single slot 212, solders to a single solder pad 216,

and mates with a single land 209. The contact 206 includes at least one contact pads 238 and at least two contact pins 240 ganged using a crossbeam 242 to give the contact 206 a comb shape. The contact 206 fits into a slot 244 in the power delivery area 226 of the socket body 204, solders to a solder pad 246, and mates with a single land 248. It is further disclosed that the pitch of contact pins 240 is smaller than the pitch of contact pins 118 in the same space. See Searls at col. 3, ll. 1-65.

Claim 1 of the present application recites an IC package having a plurality of input/output (I/O) lands with a varied pitch distance. Applicants submit that Searls does not disclose I/O lands having a varied pitch distance. Instead, Searls discloses that contact pins that are inserted to a power delivery area have a smaller pitch than pins inserted into a signal delivery (e.g., I/O) area. Nevertheless, the pins in the signal delivery area all have the same pitch. Accordingly, claim 1 is patentable over Searls.

Claims 2-8 depend from claim 1 and include additional features. Thus, claims 2-8 are also patentable over Searls.

Claim 9 recites the IC package having a plurality of input/output (I/O) pins with a varied pitch distance. Thus, for the reasons described above with respect to claim 1, claim 9 is also patentable over Searls. Since claims 10-12 depend from claim 9 and include additional features, claims 10-12 are also patentable over Searls.

Claim 13 recites a plurality of input/output pins (I/O) connectors having a varied pitch distance. Consequently, for the reasons described above with respect to claim 1, claim 13 is also patentable over Searls. Because claims 14-16 depend from claim 13 and include additional features, claims 14-16 are also patentable over Searls.

Applicants respectfully submit that the rejections have been overcome and that the claims are in condition for allowance. Accordingly, applicants respectfully request the rejections be withdrawn and the claims be allowed.


The Examiner is requested to call the undersigned at (303) 740-1980 if there remains any issue with allowance of the case.

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

BLAKELY, SOKOLOFF, TAYLOR & ZAFMAN LLP

Date: September 7, 2005



Mark L. Watson
Reg. No. 46,322

12400 Wilshire Boulevard
7th Floor
Los Angeles, California 90025-1026
(303) 740-1980